



**BAQAI MEDICAL COLLEGE**  
**3<sup>rd</sup> YEAR MBBS (2024 – 2025)**  
**(NEUROSCIENCES MODULE - II)**



**BAQAI MEDICAL COLLEGE**

**3<sup>RD</sup> YEAR MBBS**  
**SESSION 2024-25**



**NEUROSCIENCES MODULE - II**



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**SPIRAL II – INTERGRATED CURRICULUM**  
**NEUROSCIENCES MODULE - II STUDY GUIDE**  
**3<sup>rd</sup> YEAR MBBS (SESSION 2024- 2025)**



**BAQAI MEDICAL COLLEGE**  
**BAQAI MEDICAL UNIVERSITY**

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## **PREFACE**

The landscape of medical education is evolving rapidly, embracing a shift from teacher-centered to student-centered learning approaches across undergraduate and postgraduate levels. In response to these advancements, this study guide for the integrated modular system has been meticulously crafted to align with these changes, following the SPICES model of curriculum development.

1. **Student-centered Approach:** The course organization, content, and activities are predominantly structured around student engagement and empowerment.
2. **Problem-Oriented Learning:** Case-based learning is integrated into our modules to foster problem-solving skills among students.
3. **Explicit Integration:** Basic sciences content is seamlessly integrated with pre-clinical and clinical subjects to provide a comprehensive understanding of medical concepts.
4. **Community Engagement:** Field visits to satellite clinics and community healthcare centers offer students firsthand exposure to community-related health issues.
5. **Elective Opportunities:** Students are encouraged to pursue electives within our institution and other institutes to broaden their learning experiences.
6. **Structured Program:** Our curriculum unfolds systematically, starting from foundational medicine concepts and encompassing all facets of medical sciences in Spiral integration.

Therefore, this study guide serves as a comprehensive resource, offering content-related information, guidance on learning strategies, curriculum management, and outlines of student activities. It is designed to support the undergraduate MBBS program in a multidimensional manner, facilitating holistic learning and development.

<i><b>Vision</b></i>	<i><b>Mission</b></i>
	
<i><b>Baqai Medical University</b></i>	
<p>To evolve as a nucleus for higher learning with a resolution to be socially accountable, focused on producing accomplished health care professionals for services in all spheres of life at the national and global level”.</p>	<p>The mission of Baqai Medical University is to be recognized as a center of excellence in education, research, patient care, and community services by producing highly capable and knowledgeable professionals.</p>
<i><b>Baqai Medical College</b></i>	
<p>Our vision is to enhance access and excellence in medical education and research, with the aim of capacity building of students and faculty through innovations, and science and technology competencies, to achieve rapid and sustainable health. The medical graduate thus produced, will be informed, and trained enough to serve the community better, and to be an advisor to the national and international health organizations.</p>	<p>The mission of the Baqai Medical College is to produce medical graduates, who are responsible and accomplished individuals and have skills for problem-solving, clinical judgment, research, and leadership for a medical practice at the international level and are also aware of the health problems of the less privileged rural and urban population of Pakistan.</p>



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**POLICIES AND PROCEDURES**  
**Code of Conduct and Maintenance of Discipline of Students**  
**Regulations Under section 25(e) BMU Act.1996**

All University students shall be under the full disciplinary control of the University. No students shall be allowed to participate in politics. The action against the act of indiscipline shall include fines, debarring from attending class, and cancellation of admission, depending on the gravity of indiscipline.

The following shall constitute acts of indiscipline for which action may be taken against the student or students:

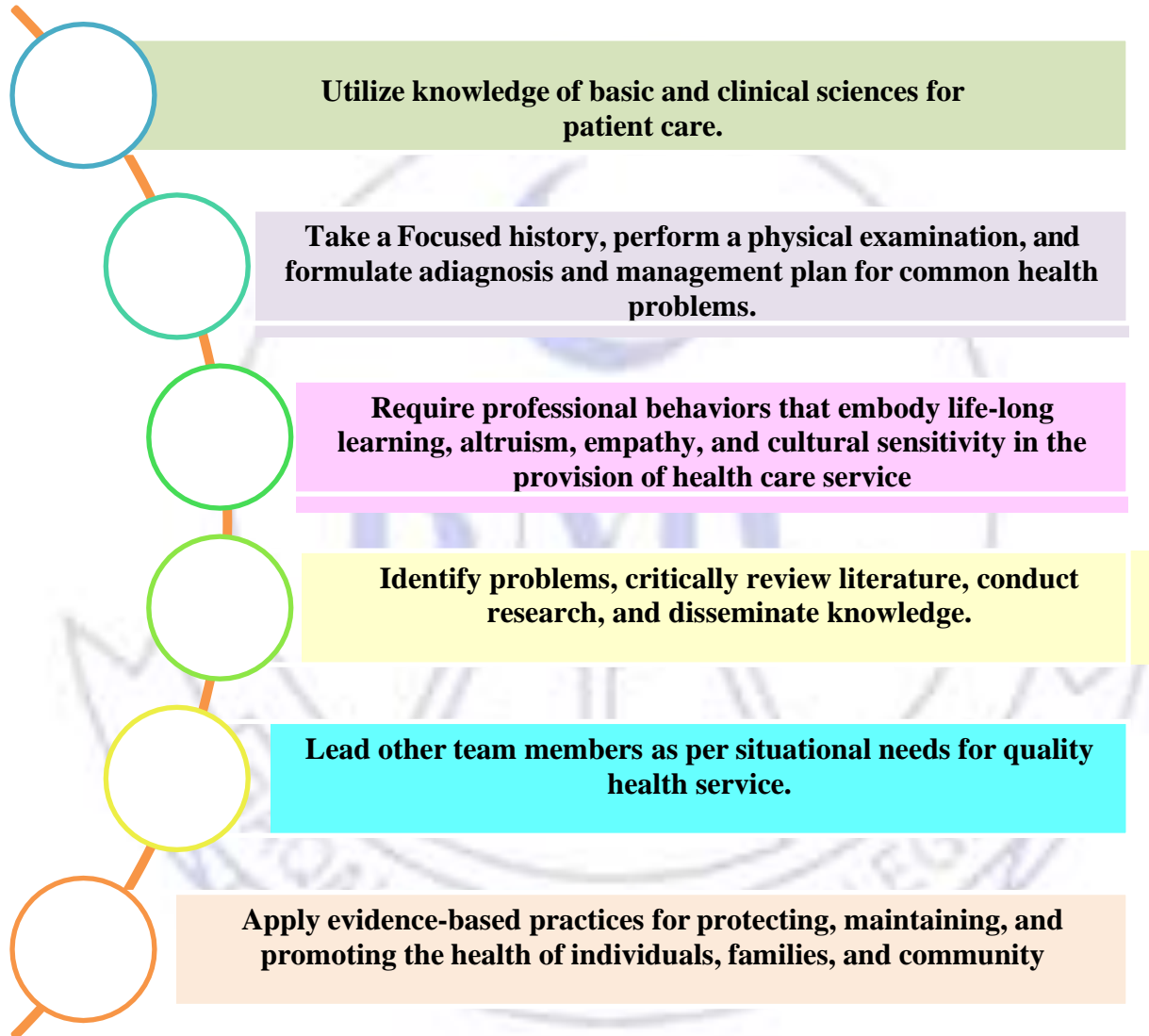
- (a) Breach of any rule public morals, such as:
  - Use of indecent or filthy language;
  - Use of immodest dress;
  - Use of undesirable remarks or gestures; and
  - Disorderly behavior, such as shouting, abusing, quarrelling, fighting and insolence.
- (b) Defiance of authority
- (c) Action, defamatory of and derogatory to Islam
- (d) Immorality
- (e) Being found under the effect of an intoxicant or misuse of drugs including marijuana, LSD dope and other opioids.
- (f) False personation or giving false information or willful suppression of information, cheating or deceiving.
- (g) Inciting or staging a walk-out, a strike, or an unauthorized procession.
- (h) Shouting of slogans derogatory to the prestige of the University or the reputation of its officers or teachers.
- (i) Visiting without a pass place which are not to be visited without a pass.
- (j) Visiting places declared out of bounds for students.

Every student must carry his / her Identity Card which will be open to examination and will be demanded at the time of entrance to the various University Faculties and functions.

No student will be admitted to the facilities of the library, transport, or the canteen unless he /she is in possession of the Identity Card.



## **OUTCOMES OF MBBS CURRICULUM**





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# *Module II*

# *NEUROSCIENCES*

# *MODULE - II*



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**MODULAR COMMITTEE**

1.	<b>Dr. Sarah Azhar (Pathology)</b>
2.	<b>Dr. Nazia Jameel (Community Medicine)</b>
3.	<b>Dr. Faraz Saleem (Pharmacology)</b>
4.	<b>Dr. Rafay A. Siddiqui (Forensic Medicine)</b>
5.	<b>Ms. Maria Rahim (Research)</b>
6.	<b>Dr. Azra Shaheen (Behavioral Sciences)</b>
7.	<b>Dr. Dania Faisal (Medicine)</b>
8.	<b>Dr. S. Abdullah Bukhari (Surgery)</b>





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**MODULAR DURATION**

Module Number	Module Name	Dates	Duration	Module In charge	Assessment Date & Pattern
4.	Neurosciences Module - II	(19 <sup>th</sup> Aug – 20 <sup>th</sup> Sept, 2024)	5 weeks	Dr. Sarah Azhar	23 <sup>rd</sup> Sept. 2024  (Subject to minor changes) MCQs, SEQs & OSPE

**ASSESSMENT TOOLS**

1. Formative assessment
  - Quiz (face to face or online)
2. Summative assessment
  - MODULAR EXAM:
    - A single modular exam will be held at the end of module which will include all the subjects taught in the module.
    - Module will be assessed by MCQ, SEQ and OSPE / Viva.



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**DEPARTMENT OF PATHOLOGY**  
**LEARNING OBJECTIVES**  
**(3<sup>rd</sup> year MBBS)**

**By the end of each Lecture the students of 3<sup>rd</sup> year MBBS will be able to:**

TOPIC	MODE OF TEACHING	TIME (hours)	LEARNING OBJECTIVES	PROPOSED NAMES OF FACILITATORS
Patterns of injury in the Nervous System	Lecture #1	1	List the causes of Injuries to nervous system. Discuss the pattern of response of the cellular constituents of the nervous system to various forms of injury. List the symptoms and signs related to injuries.	Prof. Dr. Nasima Iqbal
Cerebrovascular Diseases I	Lecture #2	1	List the causes of cerebrovascular diseases. Discuss the pathogenesis List the morphological patterns of hypoxia, cerebral ischemia (focal & global) and cerebral infarction.	Dr. M. Rizwan
Cerebrovascular Diseases II	Lecture #3	1	List the causes of intracranial haemorrhage. Discuss the pathogenesis of intracranial hemorrhage, aneurysms & vascular malformations, traumatic parenchymal and vascular cerebral injuries. Differentiate between epidural and subdural hematoma. List the symptoms and signs.	Dr. Maeesa Sajeel
Central Nervous System Infections	Lecture # 4		Identify the pathogens responsible for Central Nervous System Infections. Discuss their clinical features. Briefly describe their laboratory diagnosis and prevention.	Dr. Nadeem
Infections of the Nervous System - I	Lecture # 5	1	List the various infectious agents of the nervous system. Describe the pathogenesis and related morphology of epidural and subdural infections. Compare aseptic meningitis, acute bacterial meningitis and chronic meningitis.	Dr. Sarah Azhar
Infections of the Nervous System - II	Lecture # 6	1	Discuss the pathophysiology and related morphological findings of parenchymal infections of CNS i.e., Viral Encephalitis, Brain abscess, Fungal	Dr. Ghazal Irfan



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			Encephalitis Meningoencephalitides and Prion diseases	
Neuro-degenerative Diseases & Dementia	Lecture # 7	1	List the different neurodegenerative diseases of brain. Discuss the causes, pathogenesis & morphology of Alzheimer disease. Discuss the pathophysiology, clinical and morphological features of Parkinsonism. Explain the pathology and diagnosis of 2Huntington disease and spinocerebellar degenerations.	Dr. M. Khan
Edema, Herniation & Hydrocephalus	Lecture # 8	1	List the causes of generalized cerebral edema, vasogenic edema, cytotoxic edema & focally expanding mass lesions. List the causes of Hydrocephalus. Discuss the pathogenesis & morphology of Hydrocephalus causing disorders. Compare and Contrast Edema & Hydrocephalus. Differentiate different types of herniation, i.e., Sub-falcine (cingulate), Trans-tentorial (uncinate) & Tonsillar herniation.	Dr. Munnazah Rashid
Primary diseases of Myelin	Lecture # 9	1	List the causes of primary diseases of myelin. Discuss the pathogenesis & morphology of Multiple Sclerosis, other Acquired Demyelinating diseases.	Prof. Dr. Nasima Iqbal
Tumors of Central Nervous System- I	Lecture # 10	1	Classify the tumours of CNS. Define and classify Glioma. Compare Astrocytoma, Oligo-Dendroglioma and Ependymoma based on their etiology, pathogenesis and morphology.	Dr. M. Rizwan
Tumors of Central Nervous System- II	Lecture # 11	1	Discuss poorly differentiated neoplasms of CNS i.e., Medulloblastoma, Meningioma & other metastatic tumors with their pathogenesis and morphology.	Dr. Maeesa Sajeel
Disorders and Demyelinating Diseases of Peripheral Nervous System	Lecture # 12	1	List the causes of peripheral Neuropathy. Describe the causes, pathogenesis & morphology of Guillain-Barré Syndrome. Explain Segmental Demyelination and Axonal Degeneration Classify demyelinating disorders. Discuss demyelinating disorders on the basis of their pathogenesis, morphology and clinical features	Dr. Sarah Azhar
Tumors of Peripheral Nervous System	Lecture # 13	1	Classify the tumors arising from peripheral nervous system.	Dr. Ghazal Irfan



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			Discuss the causes, pathogenesis and morphology of Schwannoma, Neuro-fibroma, and Malignant Peripheral Nerve Sheath Tumor.	
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**By the end of small group session, the students of 3<sup>rd</sup>. year MBBS will be able to:**

TOPIC	MODE OF TEACHING	TIME (hours)	LEARNING OBJECTIVES	PROPOSED NAMES OF FACILITATORS
Cerebro-vascular diseases	Tutorial # 1	2	Comprehend a given a clinical scenario Identify the gross & microscopic features of cerebrovascular accident.	Dr. Nadeem Umar Baqai
Infections Of CNS	Tutorial # 2	2	Differentiate between different types of infective encephalitis based on the given scenarios. Comprehend the lab findings. Differentiate between different types of infective meningitis based on the given scenarios. Comprehend the lab findings. Identify the specimen on the basis of morphology	Mr. M. Rizwan
Tumours of CNS	Practical #1	2	Recall the classification List the gross & microscopic features of important tumours of CNS.	Dr. M. Yasir Rishi
FORMATIVE ASSESSMENTS	Interactive session Followed by quiz and its feedback	2	Assess the comprehension of key concepts Identify any misconceptions Facilitate peer review Understand the immediate feedback by which they can reflect on their learning and make improvements.	Dr. Sarah Azhar



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**DEPARTMENT OF PHARMACOLOGY**  
**LEARNING OBJECTIVES**  
**(3<sup>rd</sup> year MBBS)**

**By the end of each Lecture the students of 3<sup>rd</sup> year MBBS will be able to:**

TOPIC	MODE OF TEACHING	TIME (hours)	LEARNING OBJECTIVES	PROPOSED NAMES OF FACILITATORS
Local anesthetics	Lecture # 1	1	Define anesthesia. Define Local anesthetics. Classify local anesthetics with examples. Explain mechanism of action of Lidocaine. List the pharmacokinetic properties of Lidocaine. List the common side effects and contraindications of Lidocaine. List the drug interactions of Lidocaine.	Prof. Dr. Nadeem
General anesthetics i (inhaled)	Lecture # 2	1	Define general anesthesia. Classify General anesthetics Discuss stages of Anesthesia (1 to 4). Discuss patient protocol for Anesthesia selection. Explain mechanism of action of inhaled anesthetics. (Halothane, NO <sub>2</sub> , Isoflurane) List the pharmacokinetic properties of these drugs List the pharmacological effects of these drugs on various organ systems. List the common adverse effects and contraindications of these drugs.	Prof. Dr. Asif
General anesthetics ii (intravenous)	Lecture # 3	1	Classify intravenous anesthetics Explain mechanism of action of Propofol and Ketamine. List the pharmacokinetic properties of Propofol and Ketamine. List the pharmacological effects of Propofol and Ketamine on various organ systems. List the common adverse	Dr. Urooj





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			effects and contraindications of Propofol and Ketamine.	
Sedative-hypnotics	Lecture # 4	1	Classify Benzodiazepines and Barbiturates according to duration of action. Explain the mechanism of action of Benzodiazepine (Diazepam)(Phenobarbital) List the pharmacokinetics properties of these drugs. List the clinical uses of these drugs List the adverse effects and contraindications of these drugs	Prof. Dr. Nadeem
Anti- depressants	Lecture # 5	1	Outline pathophysiology of depression. Classify antidepressants on basis of their mechanism of action. List the pharmacokinetics properties of Fluoxetine, Venlafaxine, Imipramine, Phenelzine. List the clinical uses of these drugs List the adverse effects & contraindications of these drugs	Prof. Dr. Asif
Drugs used in epilepsy	Lecture # 6	1	Define and classify seizures. Classify anti-epileptic drugs. Explain mechanism of action of Carbamazepine and Valproic acid. List the pharmacokinetics properties of these drugs. Correlate the clinical uses of these anti-epileptics with the type of seizures. List the adverse effects and contraindications of these drugs	Prof. Dr. Nadeem
Anti- Parkinson drugs	Lecture # 7	1	Classify Anti Parkinson's drugs. Explain mechanism of action of Levodopa and Carbidopa. List the pharmacokinetics properties of these drugs. List the clinical uses of these drugs. List the adverse effects and contraindications of these drugs.	Dr. Faraz
Drugs used in neurodegenerative disorders	Lecture # 8	1	Classify the drugs used to treat Alzheimer's disease, multiple sclerosis and Amyotrophic lateral sclerosis (ALS). Explain the mechanism of action of Rivastigmine, Interferon-beta, Riluzole.	Dr. Sehrish





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			List the pharmacokinetics properties of these drugs. List the adverse effects of these drugs	
Drugs for bipolar disorder	Lecture # 9	1	Outline pathophysiology of bipolar disorder. List the drugs for bipolar disorder. Explain mechanism of action of Lithium. List the pharmacokinetics properties of Lithium. List the common adverse effects and contraindications of Lithium.	Dr. Humaira
Opioid agonists and antagonists	Lecture # 10	1	List the opioid agonists and antagonists with respect to target receptors. Explain mechanism of action of Morphine and Codeine. Correlate clinical use of Morphine and Codeine. List the pharmacokinetics properties of Morphine and Codeine. List the common adverse effects and contraindications of opioids.	Dr. Faraz
Drugs of abuse	Lecture # 11	1	Define Drug Abuse Classify Drugs of Abuse Enumerate various steps of the management of various drugs of abuse.	Dr. Sehrish
Anti-psychotic disorders	Lecture # 12	1	Outline pathophysiology of psychotic disorder. Classify anti-psychotic drugs. Explain mechanism of action of Chlorpromazine, Haloperidol and Fluphenazine. List the pharmacokinetics properties of these drugs. List the clinical uses of drugs List the common adverse effects and contraindications of these drugs.	Prof. Dr. Asif



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**By the end of each Small Group Session (Tutorial) the students of 3<sup>rd</sup> year MBBS will be able to:**

TOPIC	MODE OF TEACHING	TIME (hours)	LEARNING OBJECTIVES	PROPOSED NAMES OF FACILITATORS
Anesthesia	Tutorial # 1	2	List pre-anesthetic medications. Discuss the role of anti-cholinergic and benzodiazepines as pre-anesthetic medications. Discuss the pharmacodynamics and pharmacokinetics of Thiopental. Explain the pharmacological management of the given case	Dr. Hina
Anxiety disorders	Tutorial # 2	2	Discuss the pharmacodynamics and pharmacokinetics of Lorazepam. Write down the prescription of the given case.	Dr. Sehrish
Depression	Tutorial # 3	2	Define serotonin syndrome. List the common drug-interactions associated with the use of anti-depressants. Write down the prescriptions of the given cases.	Dr. Izrum
Epilepsy & Status Epilepticus	Tutorial # 4	2	Define Status Epilepticus. List drugs used to treat Status Epilepticus. Discuss the pharmacodynamics and pharmacokinetics of Ethosuximide, Gabapentin and Lamotrigine. Write down the prescriptions of the given case.	Dr. Hina
Parkinson's disease	Tutorial # 5	2	Discuss the pharmacodynamics and pharmacokinetics of Entacapone, Selegiline and Bromocriptine. Explain the pharmacological management of the given case.	Dr. Hina
Opioids	Tutorial # 6	2	Discuss the sign and symptoms of Opiate withdrawal syndrome. List the drugs used to treat Opiate withdrawal syndrome. Discuss the pharmacodynamics and pharmacokinetics of Methadone, Naloxone and Nalbuphine. Explain the pharmacological management of the given case.	Dr. Sehrish
Introduction to powders	Tutorial # 7	2	Define Powders. List the ingredients of powders. Classify Powders with examples. List the advantages and disadvantages of powders.	Dr. Izrum



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**By the end of each small group session (practical) , the students of 3<sup>rd</sup> year MBBS will be able to:**

TOPIC	MODE OF TEACHING	TIME (hours)	LEARNING OBJECTIVES	PROPOSED NAMES OF FACILITATORS
Preparation and dispensing of simple powder	Practical # 1	2	Define simple powders along with examples Demonstrate the steps of preparation and dispensing of Phenobarbitone powder. List the uses of Phenobarbitone powder.	Dr. Sumreen
Preparation and dispensing of compound powder	Practical # 2	2	Define compound powders along with examples Demonstrate the steps of preparation and dispensing of Hyoscine Hydro Bromide and pilocarpine powder. List the uses of pilocarpine powder, hyoscine Hydro Bromide powder	Dr. Hina
Demonstration of the effects of local anesthetic on leg of frog	Practical # 3	2	Differentiate between surface anesthesia and infiltrative anesthesia. Demonstrate the effects of local anesthetic i.e. Lidocaine 2% as surface anesthetic and infiltrative anesthetic on leg of frog.	Dr. Sumreen



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**DEPARTMENT OF FORENSIC MEDICINE**  
**LEARNING OBJECTIVES**  
**(3<sup>rd</sup> year MBBS)**

By the end of each lecture, the students of 3<sup>rd</sup> year MBBS will be able to:

TOPIC	MODE OF TEACHING	TIME (hours)	LEARNING OBJECTIVES	PROPOSED NAMES OF FACILITATORS
CNS Stimulants	Lecture # 1	1	List the Uses of all the above CNS Stimulants. Describe the Mechanism of Action of all these. List the Treatment options for Poisoning of all. Diagnose the Signs & Symptoms of all these Poisonings	Dr. Jan e Alam
Spinal Poison	Lecture # 2	1	List the Uses of all the above Spinal poisons Describe the Mechanism of Action the poisons List the Treatment options for Acute Poisoning Diagnose the Acute Signs & Symptoms of all these Poisonings	Dr. Rafay A. Siddiqui

By the end of each small group session (practical) , the students of 3<sup>rd</sup> year MBBS will be able to:

TOPIC	MODE OF TEACHING	TIME (hours)	LEARNING OBJECTIVES	PROPOSED NAMES OF FACILITATORS
Somniferous & Spinal Poisons	Practical#1	2	List the Uses of all the above Spinal & Somniferous Poisons. Describe the Mechanism of Action of all these. List the Treatment options for Acute Poisoning as well as Chronic Poisoning of all. Diagnose the Chronic Signs & Symptoms of all. Diagnose the Acute Signs & Symptoms of all these Poisonings	Dr. Jan-e-Alam



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Inebriant & Oil Poisons	Practical#2	2	List the Uses of all the above Oil & Inebriant Poisons. Describe the Mechanism of Action of all these. List the Treatment options for Acute Poisoning as well as Chronic Poisoning of all. Diagnose the Chronic Signs & Symptoms of all. Diagnose the Acute Signs & Symptoms of all these Poisonings	Dr. Muzammil Iqbal
Peripheral Nerve Poisons	Practical#3	2	List the Uses of all the above Peripheral Nerve Poisons. Describe the Mechanism of Action of all these. List the Treatment options for Acute Poisoning as well as Chronic Poisoning of all. Diagnose the Chronic Signs & Symptoms of all. Diagnose the Acute Signs & Symptoms of all these Poisonings	Dr. Jan-e-Alam
Deliriant & Neurotic Poisons	Practical#4	2	List the Uses of all the above Deliriant & Neurotic Poisons. Describe the Mechanism of Action of all these. List the Treatment options for Acute Poisoning as well as Chronic Poisoning of all. Diagnose the Chronic Signs & Symptoms of all. Diagnose the Acute Signs & Symptoms of all these Poisonings	Dr. Muzammil Iqbal
Corrosives I	Practical#5	2	Classify Corrosives Describe the Mechanism of Action	Dr. Jan-e-Alam





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**DEPARTMENT OF COMMUNITY MEDICINE**  
**LEARNING OBJECTIVES**  
**(3<sup>rd</sup> year MBBS)**

By the end of each lecture, the students of 3<sup>rd</sup>. year MBBS will be able to:

TOPIC	MODE OF TEACHING	TIME (hours)	LEARNING OBJECTIVES	PROPOSED NAMES OF FACILITATORS
Stroke prevention	Lecture #1	01	Describe the prevalence, burden, and impact of stroke on individuals and communities List modifiable and non-modifiable risk factors for stroke Discuss the primary and secondary prevention strategies for stroke	Prof. Dr. Nazia Jameel
Parkinson's disease prevention	Lecture #2	01	Discuss the epidemiology of Parkinson's disease. List the risk factors for Parkinson's disease Describe the prevention strategies for Parkinson's disease	Prof. Dr. Nazia Jameel
Neurological diseases in children	Lecture #3	01	List prevalent neurological diseases in children Discuss the strategies, interventions and practices for the prevention of neurological diseases in children	Prof. Dr. Nazia Jameel





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**DEPARTMENT OF RESEARCH**  
**LEARNING OBJECTIVES**  
**(3<sup>rd</sup> year MBBS)**

By the end of each lecture, the students of 3<sup>rd</sup> year MBBS will be able to:

TOPIC	MODE OF TEACHING	TIME (hours)	LEARNING OBJECTIVES	PROPOSED NAMES OF FACILITATORS
How to develop an Informed Consent Form	Small group teaching	2	Detail the contents of an informed consent form Arrange the contents of an informed consent form	Group supervisors
Generating Questions and Searching the Relevant Literature	Lecture	1+1	The types of clinical questions. Describe the areas of knowledge gap pertaining to a clinical situation To formulate well-built questions based on patient or problem, intervention, comparative intervention, Describe the outcome and the advantages of well-formulated questions	Ms. Maria Rahim



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**DEPARTMENT OF MEDICINE & ALLIED**  
**LEARNING OBJECTIVES**  
**(3<sup>rd</sup> year MBBS)**

By the end of each lecture, the students of 3<sup>rd</sup> year MBBS will be able to:

TOPIC	MODE OF TEACHING	TIME (hours)	LEARNING OBJECTIVES	PROPOSED NAMES OF FACILITATORS
Stroke	Lecture # 1	1	Define and classify strokes: Differentiate between ischemic and hemorrhagic strokes Identify the common signs and symptoms of stroke, including motor deficits, sensory deficits, speech disturbances, and visual changes. Interpret neuroimaging studies: Understand the role of CT scans and MRI in diagnosing and characterizing different types of strokes. Describe the principles of acute stroke management.	Dr. Dania Faisal
Acute Bacterial Meningitis	Lecture # 2	1	Identify the typical clinical manifestations of acute bacterial meningitis. Describe the most common bacterial pathogens responsible for acute bacterial meningitis. Explain the appropriate diagnostic tests used to confirm acute bacterial meningitis. Discuss the significance of cerebrospinal fluid (CSF) analysis, including cell count, protein, and glucose levels. Describe the principles of treatment for acute bacterial meningitis, including the use of antibiotics.	Dr. Dania Faisal



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Parkinson's Disease	Lecture # 3	1	<p>Understand and describe what Parkinson's disease is, its clinical manifestations.</p> <p>Identify the prevalence of PD and common risk factors associated with the development of the disease.</p> <p>Recognize the hallmark clinical features of PD.</p> <p>Understand the diagnostic criteria and methods used to confirm PD.</p> <p>Discuss the pharmacological approaches used to manage PD symptoms.</p>	Dr. Dania Faisal
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**DEPARTMENT OF SURGERY & ALLIED**  
**LEARNING OBJECTIVES**  
**(3<sup>rd</sup> year MBBS)**

By the end of each lecture, the students of 3<sup>rd</sup>. year MBBS will be able to:

TOPIC	MODE OF TEACHING	TIME (hours)	LEARNING OBJECTIVES	PROPOSED NAMES OF FACILITATORS
Traumatic Brain injury(A)	Lecture # 1	1	<p>To be familiar with the physiology of cerebral blood flow and the pathophysiology of raised intracranial pressure</p> <p>Classification of head injury</p> <p>Indications of Ct scan in head trauma</p> <p>Glasgow coma scale</p>	Dr. S. M. Abdullah Bukhari
Traumatic Brain injury(B)	Lecture # 2	1	<p>To understand the following:</p> <p>Fractures: skull base</p> <p>Fractures: skull vault</p> <p>Extradural hematoma</p> <p>Subdural Hematoma</p> <p>Subarachnoid Haemorrhage</p> <p>Cerebral contusions</p>	Dr. S. M. Abdullah Bukhari
Hydrocephalus	Lecture # 3	1	To understand hydrocephalus and its surgical management	Dr. S. M. Abdullah Bukhari



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**DEPARTMENT OF BEHAVIORAL SCIENCES**  
**LEARNING OBJECTIVES**  
**(3<sup>rd</sup> year MBBS)**

By the end of each lecture, the students of 3<sup>rd</sup> year MBBS will be able to:

TOPIC	MODE OF TEACHING	TIME (hours)	LEARNING OBJECTIVES	PROPOSED NAMES OF FACILITATORS
Society, Culture & Health	Lecture # 1	1	Cultural beliefs, attitudes, values, social class, Myths, stigma sick role and illness, Health belief models	Dr. Azra Shaheen
Treatment Adherence	Lecture # 2	1	Doctors' factors Patients' factors Drug factors How to improve compliance.	Dr. Azra Shaheen
Depression	Lecture # 3	1	Distinguish between sadness and depression Diagnostic criteria of Major depression Causes of depression Treatment of depression	Dr. Azra Shaheen



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**DEPARTMENT OF BIOETHICS**  
**LEARNING OBJECTIVES**  
**(3<sup>rd</sup> year MBBS)**

By the end of each lecture, the students of 3<sup>rd</sup> year MBBS will be able to:

TOPIC	MODE OF TEACHING	TIME (hours)	LEARNING OBJECTIVES	PROPOSED NAMES OF FACILITATORS
Ethical issues & dilemma	Interactive Lecture	2		Dr. Tooba Khan



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**TENTATIVE\***  
**TIME TABLES**  
**FOR**  
**NEUROSCIENCES**  
**MODULE - II**



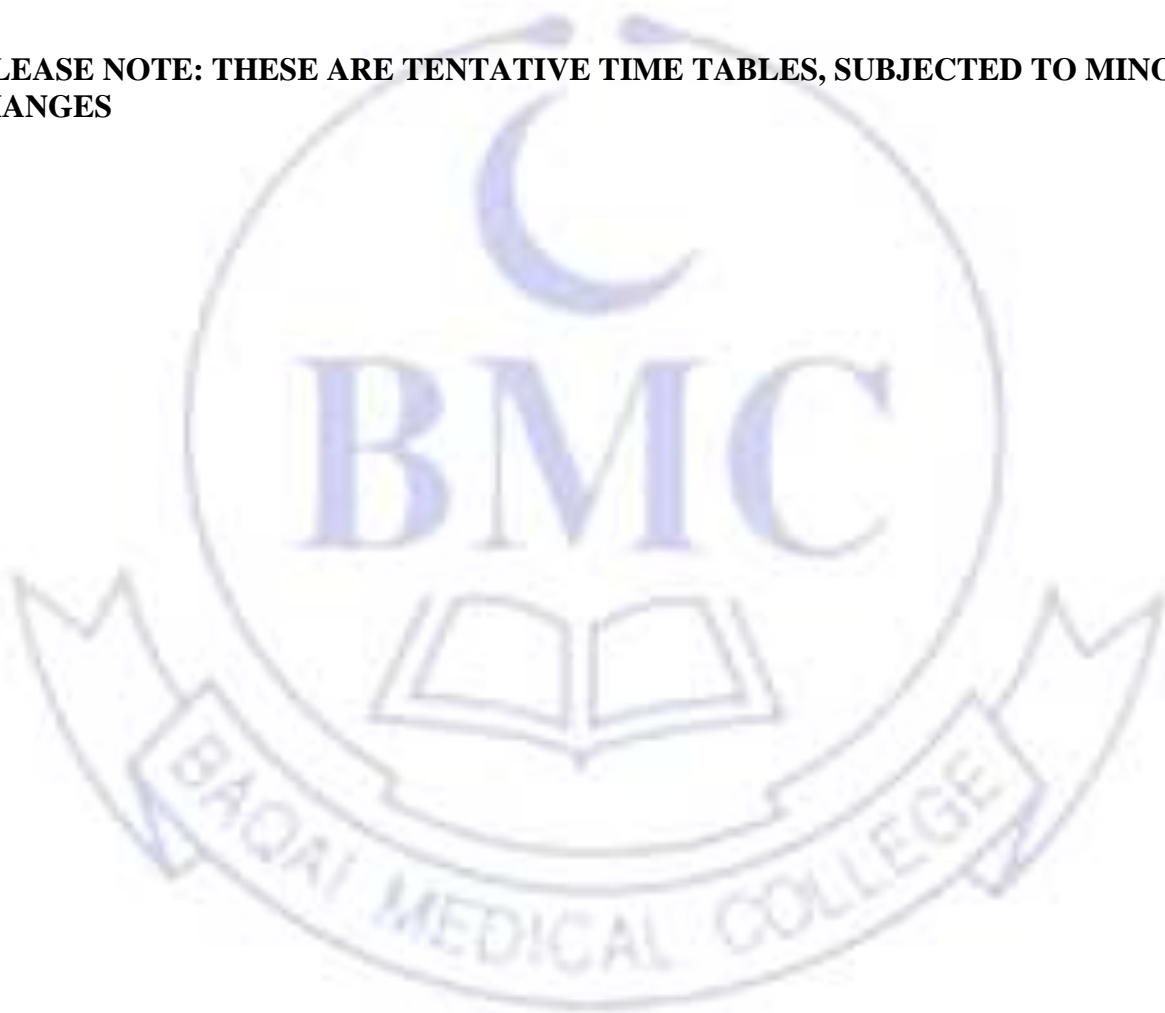


BAQAI MEDICAL COLLEGE  
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# **3<sup>rd</sup> year MBBS** **Session 2024-25**

**\*PLEASE NOTE: THESE ARE TENTATIVE TIME TABLES, SUBJECTED TO MINOR CHANGES**





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WEEK 1	19 <sup>th</sup> AUGUST 2024 - 23 <sup>rd</sup> August 2024					
	8.30 - 9.30	9.30 - 10.30	10.30-10.45	10.45-01.45	01.45-02.00	02.00 - 04.00
	Lect I	Lect II				Practical / Tutorial
Monday 19-08-2024	Patho. Patterns of injury in the Nervous System	Pharma. Sedatives & Hypnotics	TEA BREAK	CLINICS / WARDS	NAMAZ & LUNCH BREAK	Patho (A) Pharma (B) For. Med. (C) SDL (D)
Tuesday 20-08-2024	Behv. Sci.	Patho. Cerebrovascular Diseases I				Patho (B) Pharma (C) For. Med. (D) SDL (A)
Wednesday 21-08-2024	Patho. Cerebrovascular Diseases II	Com. Med Stroke prevention				Patho (C) Pharma (D) For. Med. (A) SDL (B)
Thursday 22-08-2024	Med. Stroke	For. Med. CNS Stimulants				Patho (D) Pharma (A) For. Med. (B) SDL (C)
Friday 23-08-2024	For. Med. Spinal Poison	Surg. Traumatic Brain injury(A)				RESEARCH
<b>LECTURES: Will be conducted in PHARMACOLOGY LECT. HALL, 2<sup>nd</sup> Floor, BLOCK B</b>						
PATHOLOGY TUTORIAL (Hematology Lab, 2 <sup>nd</sup> floor, Block B)		Cerebro-vascular diseases				
PHARMACOLOGY PRACTICAL (Pharma Lab, 2 <sup>nd</sup> floor, Block B)		Introduction to powders				
FORENSIC MEDICINE (For. Med. Museum, 2 <sup>nd</sup> floor, Block B)		Somniferous & Spinal Poisons				



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WEEK 2	26 <sup>th</sup> AUGUST 2024 – 30 <sup>th</sup> August 2024					
	8.30 - 9.30	9.30 - 10.30	10.30-10.45	10.45-01.45	01.45-02.00	02.00 - 04.00
	Lect I	Lect II				Practical / Tutorial
Monday 26-08-2024	Patho. Central Nervous System Infections	Pharma. General anesthetics (inhaled)	TEA BREAK	CLINICS / WARDS	NAMAZ & LUNCH BREAK	Patho (A) Pharma T (B) For. Med. (C)
Tuesday 27-08-2024	Surg. Traumatic Brain injury(B)	Patho. Infections of the Nervous System - I				Patho (B) Pharma T (C) For. Med. (A)
Wednesday 28-08-2024	Patho. Infections of the Nervous System – II	Com. Med Neurological diseases in children				Patho (C) Pharma T (A) For. Med. (B)
Thursday 29-08-2024	Pharma General anesthetics ii(intravenous)	Med. Acute Bacterial Meningitis				Pharma P (A) SDL (B)
Friday 30-08-2024	Behv. Sci. Society, Culture & Health	Pharma. Local anesthetics				Pharma P (B) SDL (A)
<b>LECTURES: Will be conducted in PHARMACOLOGY LECT. HALL, 2<sup>nd</sup> Floor, BLOCK B</b>						
PATHOLOGY TUTORIAL (Hematology Lab, 2 <sup>nd</sup> floor, Block B)		Infections of CNS				
PHARMACOLOGY TUTORIAL (Pharma Lect Hall, 2 <sup>nd</sup> floor, Block B)		Anesthesia				
PHARMACOLOGY PRACTICAL (Pharma Lab, 2 <sup>nd</sup> floor, Block B)		Demonstration of the effects of local anesthetic on leg of frog				
FORENSIC MEDICINE (For. Med. Museum, 2 <sup>nd</sup> floor, Block B)		Deliriant & Neurotic Poisons				



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WEEK 3	02 <sup>nd</sup> September 2024 – 06 <sup>th</sup> September 2024					
	8.30 - 9.30	9.30 - 10.30	10.30-10.45	10.45-01.45	01.45-02.00	02.00 - 04.00
	Lect I	Lect II				Practical / Tutorial
Monday 02-09-2024	Patho. Neuro-degenerative Diseases & Dementia	Pharma. Drugs used in neurodegenerative disorders	TEA BREAK	CLINICS / WARDS	NAMAZ & LUNCH BREAK	TENTATIVE BMU SPORTS WEEK
Tuesday 03-09-2024	Patho. Primary diseases of Myelin	Com. Med. Parkinson's disease prevention				
Wednesday 04-09-2024	Pharma Anti-Parkinson drugs	Med Parkinson's Disease				
Thursday 05-09-2024	Patho. Edema, Herniation & Hydrocephalus	Surg. Hydrocephalus				
Friday 06-09-2024	Behv. Sci Depression	Pharma. Anti- depressants				

**LECTURES: Will be conducted in PHARMACOLOGY LECT. HALL, 2<sup>nd</sup> Floor, BLOCK B**



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**09<sup>th</sup> September 2024 – 13<sup>th</sup> September 2024**

WEEK 4	8.30 - 9.30	9.30 - 10.30	10.30-10.45	10.45-01.45	01.45-02.00	02.00 - 04.00
	Lect I	Lect II				Practical / Tutorial
Monday 09-09-2024	Patho. Tumors of Central Nervous System- I	Pharma. Drugs used in epilepsy	<b>TEA BREAK</b>	<b>CLINICS / WARDS</b>	<b>NAMAZ &amp; LUNCH BREAK</b>	Patho (A) Pharma-1 (B) For. Med.-1 (C)
Tuesday 10-09-2024	Pharma. Drugs for bipolar disorder	Patho. Tumors of Central Nervous System- II				Patho (B) Pharma-1 (C) For. Med. -1 (A)
Wednesday 11-09-2024	CBL					Patho (C) Pharma-1 (A) For. Med. – 1 (B)
Thursday 12-09-2024	Pharma. Anti-psychotic disorders	Patho Disorders and Demyelinating Diseases of Peripheral Nervous System				Pharma-2 (A) For. Med-2. (B)
Friday 13-09-2024	Pharma Tutorial Anxiety (Group A & B)					For. Med-2 (A) Pharma-2 (B)

**LECTURES: Will be conducted in PHARMACOLOGY LECT. HALL, 2<sup>nd</sup> Floor, BLOCK B**

PATHOLOGY TUTORIAL (Hematology Lab, 2 <sup>nd</sup> floor, Block B)	Tumours of CNS	
PHARMACOLOGY TUTORIAL-1 (Pharma Lect Hall, 2 <sup>nd</sup> floor, Block B)	Depression	
PHARMACOLOGY TUTORIAL-2 (Pharma Lect Hall, 2 <sup>nd</sup> floor, Block B)	Epilepsy & status epilepticus	
FORENSIC MEDICINE - 1 (For. Med. Museum, 2 <sup>nd</sup> floor, Block B)	Inebriant & Oil Poisons	
FORENSIC MEDICINE - 2 (For. Med. Museum, 2 <sup>nd</sup> floor, Block B)	Corrosives I	



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WEEK 5	16 <sup>th</sup> September 2024 – 20 <sup>th</sup> September 2024					
	8.30 - 9.30	9.30 - 10.30	10.30-10.45	10.45-01.45	01.45-02.00	02.00 - 04.00
	Lect I	Lect II				Practical / Tutorial
Monday 16-09-2024	Behv. Sci Treatment Adherence	Pharma. Opioid agonists and antagonists	<b>TEA BREAK</b>	<b>CLINICS / WARDS</b>	<b>NAMAZ &amp; LUNCH BREAK</b>	Patho (A) Pharma-1 (B) For. Med. (C)
Tuesday 17-09-2024	Patho Tumors of Peripheral Nervous System	Pharma. Drugs of abuse				Patho (B) Pharma-1 (C) For. Med. (A)
Wednesday 18-09-2024	<b>BIOETHICS</b>	<b>EBM</b>				Patho (C) Pharma-1 (A) For. Med. (B)
Thursday 19-09-2024	Pharma Practical Preparation and dispensing of simple powder (A) Preparation and dispensing of compound powder (B)					Pharma-2 (A) SDL (B)
Friday 20-09-2024	Pharma Practical Preparation and dispensing of simple powder (B) Preparation and dispensing of compound powder (A)					Pharma-2 (B) SDL (A)
<b>LECTURES: Will be conducted in PHARMACOLOGY LECT. HALL, 2<sup>nd</sup> Floor, BLOCK B</b>						
PATHOLOGY TUTORIAL (Hematology Lab, 2 <sup>nd</sup> floor, Block B)		Formative assessment				
PHARMACOLOGY TUTORIAL-1 (Pharma Lect Hall, 2 <sup>nd</sup> floor, Block B)		Opioids				
PHARMACOLOGY TUTORIAL-2 (Pharma Lect Hall, 2 <sup>nd</sup> floor, Block B)		Parkinson's disease				
FORENSIC MEDICINE (For. Med. Museum, 2 <sup>nd</sup> floor, Block B)		Peripheral Nerve Poisons				





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**TENTATIVE DATE FOR MODULAR ASSESSMENT: 23<sup>rd</sup>**  
**September, 2024**



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